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10/555,273	11/02/2005	Shingo Matsumoto	125850	4432
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/555,273

Applicant(s)

MATSUMOTO ET AL.

Examiner

REGINALD A. RENWICK

Art Unit

3714

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 13 February 2009.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-17 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-17 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SG/US)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

Claim Rejections - 35 USC § 112

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claims 1-15 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

3. Regarding claims 1, 7 and 15, the phrase "similar to a computer" renders the claims indefinite since the metes and bounds of the claim limitations can not be established. It is not clear what applicants are attempting to encompass by the above limitation. Is it an apparatus with a processor, an apparatus which has a square shape like a computer, an apparatus that sits on a floor or a desk? or something else entirely.

You have not made a rejection for the pre-ambls of the claims as we discussed. The Pre-ambls state "Game Information" but the body of the claim is directed to the input device and the apparatus therefore the body appears to be outside the scope of the pre-amble. I assume that for examination purposes you assumed that a system is being claimed comprising game information, an input device and an apparatus.

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

1. Claims 1, 2, 4, 5, 8, 12, 14, 16 is rejected under 35 U.S.C. 103(a) as being unpatentable over Gilboa (U.S. Patent No. 5,853,327) in view of StarFox (GameFAQs: StarFox).

2. **Re claims 1 and 16** : Gilboa discloses game information for causing an apparatus similar to a computer to function, the apparatus connected to an input system (column 7, lines 1-7), the input system comprising: a tablet using an electromagnetic induction method (column 4, lines 4-7; column 3, lines 54-65); and a formed object incorporating a coil for performing predetermined communication using an electromagnetic induction method when placed on the tablet (column 20, lines 51-55), a memory for storing identification information on the formed object (column 4, lines 15-29, column 11, lines 10-15) the apparatus obtains from the input system a placed position and a direction on the tablet, and identification information on the formed object (Abstract; column 7, lines 36-41; column 11, lines 10-15), wherein the apparatus is caused to function as: a change detecting unit for detecting a change of the placed position and the direction obtained from the input system (column 8, lines 37-59; column

12, lines 13-30); a selecting unit for selecting character information corresponding to the identification information obtained from the input system out of a plurality of character information, each of which includes image information on a character imitating a figure of the formed object and is associated with the identification information on the formed object (column 8, lines 20-30; column 9, lines 32-39); a character control unit for disposing the character, imitating the figure of the formed object placed on the tablet, in a game space according to the character information selected by the selecting unit (column 9, lines 32-39), and for controlling motion and movement of the character according to the change detected by the change detecting unit (column 9, lines 39-44); and an image generating unit for generating an image in the game space including the character controlled by the character control unit (column 9, lines 39-44). The first amendment made to the claim language which states "a correlating area setting unit for setting discretionarily a size of a correlating area correlating with a placement detectable area on the tablet, and setting a position of the correlating area in a game space" is adequately met by Gilboa in that when the a particular formed object is placed on a certain place on the detectable area on the table wherein the object's position in the correlating area is set accordingly in a discretionary manner (Fig. 2A-2E).

The Applicant has also amended the claim language to state that the character is displayed regardless of the size of the correlating area and regardless of where in the placement detectable area a player places the formed object. Within the spaceship game embodiment, Gilboa discloses a first person view wherein a player controls the

character to perform the action of shooting enemies according to a predetermined action pattern wherein bullets are released from the spaceship and when the change in position detected by the tablet is in a position where the bullets can satisfy the predetermined condition of hitting the enemy space ship, the action has been completed (column 8, lines 37-49). Furthermore within the spaceship game image generating unit displays a space environment wherein the correlating area is the entire space environment for which the spacecraft operates regardless of where the spaceship is placed on the detectable area tablet . Gilboa also discloses in another embodiment that a representation of a character can be displayed on the display screen (Fig. 2D; column 8, lines 13-19) and thus the combination of the spaceship game and the previous embodiment would have placed the spaceship on the display screen within the correlating area regardless of the size of the correlating area.. Furthermore, Gilboa discloses identifying the direction of the character (column 3, lines 54-62; column 8, lines 47-49; column 17, lines 46-50; claim 15). Therefore the displayed spaceship would also show the direction of the spaceship. It would have been obvious to one skilled in the art to modify the spaceship game of Gilboa with the character displaying feature of the storybook game of Gilboa, for the purpose of allowing the player to see where exactly their character is in relation to the enemy spaceship.

However, the combination of the spaceship and story book embodiment would not have necessarily placed the spaceship within the correlating area regardless of size of the correlating area. Therefore attention must be directed towards StarFox which discloses

a spaceship game similar to that of Gilboa that requires the player to shoot enemy spacecraft, and also contains a switchable first person cockpit view and a third person view where the spaceship is displayed regardless of the size of the correlating area, and the direction and position of the spaceship is controlled by the user control. The combination of Gilboa and StarFox would allow players to view their spaceship on the display screen wherein the spaceship will be moved in accordance with the position of spaceship and can be rotated to the direction according to the direction of the character on the tablet. It would have been obvious to one skilled in the art to modify the spaceship game of Gilboa with the switchable views of StarFox to allow players to both view the game from the prospective of a cockpit, and also view the game in a larger perspective of the spaceship itself wherein both views offer advantages to the player.

Re claim 2: Gilboa discloses the apparatus further functions as a correlating area setting unit for setting in the game space an area correlating with a placement detectable area on the tablet, and wherein the character control unit disposes the character, imitating the figure of the formed object placed on the tablet, at a position in the game space correlating with the placed position obtained from the input system with the direction obtained from the input system with reference to the area in the game space set by the correlating area setting unit (column 7, lines 64-67; column 8, lines 1-20).

Re claim 8: Gilboa discloses a space ship game embodiment where it is inherently necessary to continuously move the space ship to avoid enemy fire from the enemy space craft on the display screen. Gilboa further discloses that the gaming system identifies the orientation of the gaming piece (column 5, lines 19-28), which one skilled in the art would reasonably assume incorporate the turn direction. StarFox further discloses Furthermore, within the game of StarFox, the user turns their space craft to avoid enemy fire and achieve better angles for returning fire (GameFAQs: StarFox: "Controls". It would have been obvious to one skilled in the art to incorporate the detection of turn direction and the amount of a turn within the space embodiment craft to aid in the space ship's ability to avoid enemy fire and returning fire.

Re claim 12: Gilboa discloses that within the space ship embodiment, the player moves the game indicia across the game tablet and as a result the space ship avoids the displayed enemy fire. StarFox discloses that a user utilizing a game controller to create a movement path which is reflected in the continuous movement of the space ship on the display device. The combination of Gilboa and StarFox would display a movement of a space ship on the display screen based upon the continuous movement path of the game indicia on the tablet (see claim 1 for combination).

Re claim 14: Gilboa discloses computer memory of a processing unit that records and stores game information (column 14, lines 39-42).

3. Claims 4 and 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over Gilboa in view of StarFox in further view of Atari Achieves (herein known as Tempest 2000).

Re claims 4: Gilboa discloses that the first size of the correlating unit wherein the correlating unit is the space environment encompassing the enemy unit. However, Gilboa nor Star Fox discloses that the size of the correlating area is set according to character information selected by the selecting unit. Therefore attention must be directed towards Tempest 2000 which discloses a correlating unit wherein the player moves according within the correlating unit, however if the player indicates a jump, the player will jump off of the correlating unit web area, and the correlating unit area will become smaller, and then larger again when the player lands back onto the correlating unit area. It would have been obvious to one skilled in the art at the time the invention was made to modify the game of Gilboa and StarFox in combination, with the variable perspective correlating unit of Tempest 2000, for the purpose of reflecting particular player actions on the game display.

Re claim 5: Gilboa in combination with StarFox fails to disclose the area variable unit comprises a second variable unit for making the size of the area in the game space variable, the size set according to and corresponding to game progress wherein area variable unit is the computer processor. Therefore attention must be directed towards Tempest 2000 which discloses a displayed correlating area in which a user operates a

space craft, wherein the correlating area changes based on the particular level being played where one level can encompass a square correlating area and another can encompass a circular correlating area. It would have been obvious to one skilled in the art to modify the game of Gilboa and StarFox with the variable size correlating unit of Tempest 2000, for the purpose of reflecting various levels of gameplay.

4. Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over Gilboa in view StarFox (GameFAQs: StarFox) of Fukushima (U.S. Patent No. 5,633,471) in further view of McDermott (U.S. Patent 5,635,683).

Re claim 6: Although Gilboa discloses that the game pieces must be present on the invention board in order for the video screen to display certain character information, Gilboa does not disclose that the game piece includes a pressure detecting unit for detecting when pressure is applied to the game piece. However, McDermott discloses a hand held game object wherein the game object position is detected by a game system in accordance with a game tablet. McDermott further discloses the game object includes a pressure sensor for detecting pressure placed on it by the player, which communicates a game feature to the game system (Abstract; column 2, lines 39-50). It would have been obvious to one skilled in the art to modify the hand held game object of Gilboa with the pressure sensor of McDermott for the purpose of providing a variety of game functions in association with the pressure placed on the game object.

5. Claim 7, 9, 13, 15, and 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gilboa in view of Toshiyuki et al. (JP 2002-301264 A) in further view of StarFox (GameFAQs: StarFox).

Re claims 7 and 17: Gilboa discloses game information for causing an apparatus similar to a computer to function the apparatus connected to an input system (column 7, lines 1-7), the input system comprising: a tablet using an electromagnetic induction method (column 4, lines 4-7; column 3, lines 54-65); and a formed object incorporating a coil for performing predetermined communication using an electromagnetic induction method when placed on the tablet (column 20, lines 51-55), a memory for storing identification information on the formed object (column 4, lines 15-29, column 11, lines 10-15) the apparatus obtains from the input system a placed position and a direction on the tablet, and identification information on the formed object (Abstract; column 7, lines 36-41; column 11, lines 10-15), wherein the apparatus is caused to function as: a change detecting unit for detecting a change of the placed position and the direction obtained from the input system (column 8, lines 37-59; column 12, lines 13-30); a selecting unit for selecting character information corresponding to the identification information obtained from the input system out of a plurality of character information, each of which includes image information on a character imitating a figure of the formed object and is associated with the identification information on the formed object (column 8, lines 20-30; column 9, lines 32-39); a character control unit for disposing the character, imitating the figure of the formed object placed on the tablet, in a game space

according to the character information selected by the selecting unit (column 9, lines 32-39), and for controlling motion and movement of the character according to the change detected by the change detecting unit (column 8, lines 37-45); and an image generating unit for generating an image in the game space including the character controlled by the character control unit (column 8, lines 20-30; column 9, lines 32-39). Gilboa fails to disclose the use of a playing card on the electronic tablet. However Toshiyuki et al. discloses a card game device where players place cards onto an electronic tablet where the cards are subsequently read and then used in a game (abstract). Because both Gilboa and Toshiyuki et al. disclose game indicia, it is obvious to one skilled in the art to simply substitute one game indicia for another for the purpose of displaying virtual game indicia that corresponds to game indicia on a physical game board.

Gilboa discloses "a correlating area setting unit for setting discretionarily a size of a correlating area correlating with a placement detectable area on the tablet, and setting a position of the correlating area in a game space" in that when the a particular formed object is placed on a certain place on the detectable area on the table wherein the object's position in the correlating area is set accordingly in a discretionary manner (Fig. 2A-2E). Gilboa also discloses the amended claim language of "a character control unit for disposing the character, imitating the figure of the formed object in the position of the correlating area correlating with the placed position of the formed object in the placement detectable area according to the character information selected by the selecting unit" (Fig. 2C). Gilboa discloses in Figures 2A-2E that formed objects at a

certain position initiate an on-screen action within a preset area of the correlating unit.

Within the spaceship game embodiment, Gilboa discloses a first person view wherein a player controls the character to perform the action of shooting enemies according to a predetermined action pattern wherein bullets are released from the spaceship and when the change in position detected by the tablet is in a position where the bullets can satisfy the predetermined condition of hitting the enemy space ship, the action has been completed (column 8, lines 37-49). Furthermore within the spaceship game image generating unit displays a space environment wherein the correlating area is the entire space environment for which the spacecraft operates regardless of where the spaceship is placed on the detectable area tablet. Gilboa also discloses in another embodiment that a representation of a character can be displayed on the display screen (Fig. 2D; column 8, lines 13-19) and thus the combination of the spaceship game and the previous embodiment would have placed the spaceship on the display screen within the correlating area regardless of the size of the correlating area. Furthermore, Gilboa discloses identifying the direction of the character (column 3, lines 54-62; column 8, lines 47-49; column 17, lines 46-50; claim 15). Therefore the displayed spaceship would also show the direction of the spaceship. It would have been obvious to one skilled in the art to modify the spaceship game of Gilboa with the character displaying feature of the storybook game of Gilboa, for the purpose of allowing the player to see where exactly their character is in relation to the enemy spaceship.

However, the combination of the spaceship and story book embodiment would not have necessarily placed the spaceship within the correlating area regardless of size of the correlating area. Therefore attention must be directed towards StarFox which discloses a spaceship game similar to that of Gilboa that requires the player to shoot enemy spacecraft, and also contains a switchable first person cockpit view and a third person view where the spaceship is displayed regardless of the size of the correlating area, and the direction and position of the spaceship is controlled by the user control. The combination of Gilboa and StarFox would allow players to view their spaceship on the display screen wherein the spaceship will be moved in accordance with the position of spaceship and can be rotated to the direction according to the direction of the character on the tablet. It would have been obvious to one skilled in the art to modify the spaceship game of Gilboa with the switchable views of StarFox to allow players to both view the game from the perspective of a cockpit, and also view the game in a larger perspective of the spaceship itself wherein both views offer advantages to the player.

Re claim 9: Gilboa discloses a space ship game embodiment where it is inherently necessary to continuously move the space ship to avoid enemy fire from the enemy space craft on the display screen. Gilboa further discloses that the gaming system identifies the orientation of the gaming piece (column 5, lines 19-28), which one skilled in the art would reasonably assume incorporate the turn direction. StarFox further discloses Furthermore, within the game of StarFox, the user turns their space craft to avoid enemy fire and achieve better angles for returning fire (GameFAQs: StarFox:

"Controls". It would have been obvious to one skilled in the art to incorporate the detection of turn direction and the amount of a turn within the space embodiment craft to aid in the space ship's ability to avoid enemy fire and returning fire.

Re claims 13: Gilboa discloses that within the space ship embodiment, the player moves the game indicia across the game tablet and as a result the space ship avoids the displayed enemy fire. StarFox discloses that a user utilizing a game controller to create a movement path which is reflected in the continuous movement of the space ship on the display device. The combination of Gilboa and StarFox would display a movement of a space ship on the display screen based upon the continuous movement path of the game indicia on the tablet (see claim 1 for combination).

Re claim 15: Gilboa discloses computer memory of a processing unit that records and stores game information (column 14, lines 39-42).

6. Claims 10 and 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gilboa in view of in view of StarFox (GameFAQs: StarFox) in view of Toshiyuki et al. in further view of Watson et al. (U.S. Patent No. 5,821,916).

Re claim 10: Gilboa does not explicitly state that the change detecting unit comprises a speed detecting unit for detecting a speed by detecting a change per predetermined unit

time for the placed position obtained from the input system. However, Watson et al. discloses a digitizer tablet and handheld device that interacts with the tablet similar to that of Watson, wherein the user uses the handheld device to write on the tablet display that directly corresponds with the movement of a cursor on a display that illustrates the handwriting of the user (column 1, lines 40-52). Therefore because of the relationship between the digitizer tablet and the computer system, the processor will always recognize the speed of the stylus that is being moved across the game tablet and display the speed of the cursor on the display screen to be directly proportional to the speed of stylus on the tablet. The combination of Watson and Gilboa would detect the speed of the movement of held tablet indicia and would result in detecting the speed of the space ship movement within the game. It would have been obvious to one skilled in the art to modify the game machine of Gilboa to incorporate moving a virtual object in correlation with a physical object based on the object's speed as disclosed by Watson et al., for the purpose of the movement of the space ship dodging of enemy fire.

Re claim 11: Gilboa does not explicitly state that the change detecting unit comprises a speed detecting unit for detecting a speed by detecting a change per predetermined unit time for the placed position obtained from the input system. However, Watson et al. discloses a digitizer tablet and handheld device that interacts with the tablet similar to that of Watson, wherein the user uses the handheld device to write on the tablet display that directly corresponds with the movement of a cursor on a display that illustrates the handwriting of the user (column 1, lines 40-52). Therefore because of the relationship

between the digitizer tablet and the computer system, the processor will always recognize the speed of the stylus that is being moved across the game tablet and display the speed of the cursor on the display screen to be directly proportional to the speed of stylus on the tablet. The combination of Watson and Gilboa would detect the speed of the movement of held tablet indicia and would result in detecting the speed of the space ship movement within the game. It would have been obvious to one skilled in the art to modify the game machine of Gilboa to incorporate moving a virtual object in correlation with a physical object based on the object's speed as disclosed by Watson et al., for the purpose of the movement of the space ship dodging of enemy fire.

Response to Arguments

4. Applicant's arguments with respect to claims 1-17 have been considered but are moot in view of the new ground(s) of rejection. In response to the Applicant's arguments, the examiner has provided the space ship game of Gilboa and the game of StarFox to address the deficiencies cited in Gilboa and Watson in combination. The combination of Gilboa and StarFox as stated above provides continuous movement as is inherent in the space ship game of Gilboa for avoiding space ship fire and shooting bullets at enemy spacecrafts (column 8, lines 45-57). The incorporation of StarFox into Gilboa provides an on-screen representation of the space ship that is absent in Gilboa, whereby the on-screen representation is always present in the correlating area as is in agreement the 3rd person camera angle in StarFox. Thus, the displayed game piece

representation would be shown regardless of the size of the correlating area wherein the correlating area is the displayed space environment of Gilboa. Furthermore, the Applicant has argued that Gilboa and Watson in combination, and in combination with other art stated in the rejection, lack disclosing the particular direction of the hand held game piece. However, Gilboa clearly discloses recognizing the direction of the hand-held game object (column 3, lines 54-62; claim 14, and claim 15).

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to REGINALD A. RENWICK whose telephone number is (571)270-1913. The examiner can normally be reached on Monday-Friday, 7:30AM-5:00PM, Alt Fridays, EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Peter Vo can be reached on 571-272-4690. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO

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/Dmitry. Suhol/
Supervisory Patent Examiner, Art
Unit 3714

4/15/2009

/R. A. R./

Examiner, Art Unit 3714